STATE AUTOMATION SYSTEMS STUDY

SITE VISIT: MARCH 10 - 12, 1993

ARIZONA STATE REPORT

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FINAL

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STATE PROFILE

System Name:	Arizona Technical Eligibility Computer System (AZTECS)/AZTECS Performance Modifications Enhancements (AZTECS MOD)
Start Date:	October 1985 (AZTECS) January 1990 (AZTECS MOD)
Completion Date:	June 1988 (AZTECS) June 1993 (AZTECS MOD)
Contractor:	Systemhouse, Inc. (AZTECS) In-house development (AZTECS MOD)
Transfer From:	Alaska (EIS)

Cost*:

Actual:	$18,814,946
Projected:	$ 8,761,000
FSP Share:	$12,460,363
FSP %:	66.2%

Number of Users: 4,900

Basic Architecture:

Mainframe:	Hitachi EX/100
Workstations:	IDEA/Courier - 3270 type
Telecommunications Network:	SNA/SDLC 4.8 or 9.2 KB circuits

System Profile:

Programs:	Food Stamp, Aid to Families with Dependent Children

*   Cost data include actual development costs incurred between October 1985 and June 1988
    for AZTECS and estimated AZTECS MOD costs for January 1990 through June 1993.

1.0   STATE OPERATING ENVIRONMENT

The Arizona Department of Economic Security (DES) consists of the following nine Divisions:

- Benefits and Medical Eligibility
- Children and Family Services
- Developmental Disabilities
- Aging and Community Service
- Child Support Enforcement
- Employment and Rehabilitation Services
- Administrative Services
- Business and Finance
- Data Administration

The Division of Benefits and Medical Eligibility is the organization responsible for the administration and operation of the Food Stamp Program (FSP). The Benefits and Medical Eligibility Division is comprised of the following operational units:

- Family Assistance Administration (FAA)
- Program Evaluation
- Disability Determination

Food Stamp Program operations are administered by FAA through a network of 79 local offices supporting 15 counties. One county, Maricopa, contains approximately 51.3 percent of the FSP caseload. Approximately 87.5 percent of the population is considered to be in urban environments; however, much of the State is rural, with a large percentage of land held in Federal reservations.

Arizona's population was 3,677,985 in 1990, according to the US Bureau of the Census. Approximately 10.7 percent of the population received food stamp benefits in 1991.

Unemployment rates from 1987 through 1989 dropped from 6.2 to 5.2 percent, but rose to 5.7 percent in 1991.

The October 1992 report, *The Fiscal Survey of States*, provides the following information compiled by the National Association of State Budget Officers:

- Arizona's nominal expenditure growth for Fiscal Year (FY) 1993 is in the 0.0 to 4.9 percent range; the national average of 2.4 percent also was in this range.

- $23.3 million was cut from the approved 1992 State budget.

- Cost-of-living increases for Aid to Families with Dependent Children (AFDC) Program recipients totaled 4.7 percent for FY 1993.

- Arizona's 1993 personal income tax revenue decreased by $4.2 million.

- State government employment levels dropped 0.71 percent, virtually equal to the national average decrease of 0.6 percent.

- The regional outlook indicated slow growth and about average unemployment. The regional weighted unemployment rate of 7.9 percent was slightly higher than the national average of 7.8 percent, but excluding Texas, the unemployment rates for other states in the Southwest region were below the national average. The per capita personal income increase for the region (3.6 percent) was higher than the national average of 2.4 percent.

2.0   FOOD STAMP PROGRAM OPERATIONS

State staff did not indicate any particular economic or population trends that had an impact on FSP operations. Arizona operates an extensive itinerant services program designed to provide outreach to potential clients who may not otherwise be served due to lack of transportation and the remote nature of certain areas of the State. Arizona's itinerant issuance program includes over 110 sites. All counties and geographical areas are included in the direct mail issuance system. This results in a organizational concentration on developing and maintaining community resource networks to help support the various FAA programs.

The Family Assistance Administration is responsible for FSP policy and local administration of FSP operations. The latter is accomplished through the State's network of 79 local offices.

The Division of Data Administration (DDA) operates the data center and provides technical and application support to AZTECS.

2.1   Food Stamp Program Participation

Participation levels for the Food Stamp Program and other public assistance programs for the last five years are presented in Table 2.1. The number of FSP households increased by 116 percent from 77,572 in 1988 to 167,380 in 1992. The number of individuals receiving food stamps increased from 232,334 to 460,042, or 98 percent, during the same period.

Participation changes in other program areas follow a similar pattern. The number of households participating in AFDC increased by 93 percent during the 1988 to 1992 period. The number of individuals receiving Medicaid assistance increased by 101 percent between 1989 and 1992, and General Assistance (GA) participation increased by 72 percent during the five year period.

Table 2.1 Average Monthly Public Assistance Participation

Program	1992	1991	1990	1989	1988
AFDC-cases	62,545	51,827	44,755	36,168	32,478
AFDC- individuals	175,286	146,599	128,363	105,762	95,025
FSP-households	167,380	139,302	112,539	90,355	77,572
FSP-individuals	460,042	392,429	323,030	263,546	232,334
Medicaid-individuals	107,236	96,731	80,653	53,237	N/A
GA-cases	8,050	7,035	5,777	4,798	4,655
GA-recipients	8,050	7,054	5,789	4,809	4,668
Foster Care	N/A	N/A	N/A	N/A	N/A

2.2 FSP Benefits Issued Versus FSP Administrative Costs

The ratio of benefits issued to FSP administrative costs has improved from 7.0:1 in 1988 to 19.7:1 in 1992.

Arizona's average monthly benefit issuance per household over the last five years, as provided in Table 2.2, has increased.[1]

Table 2.2 FSP Benefits Issued

	1992	1991	1990	1989	1988
Average Monthly Benefit Per Household	$188.90	$187.61	$180.81	$163.57	$161.45

2.3 FSP Administrative Costs

Arizona's Food Stamp Program administrative costs for the past five years are presented in Table 2.3.[2] While total costs have decreased slightly during the period, the average cost per household has decreased by a far greater percentage, 58.3 percent, from 1988 to 1992. State staff indicated that the rapid expansion of the Medical Assistance Program during this period enabled fixed costs to be allocated to a larger number of cases. State staff also indicated that the implementation of the Primary Program cost allocation methodology resulted in a larger allocation to Medical Assistance and a smaller allocation to the Food Stamp Program.

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[1] The number of households and benefit amounts use data reported in the FNS *State Activity Reports* each year.

[2] The number of households and FSP Federal administrative costs are derived from data reported in the FNS *State Activity Reports* each year.

Table 2.3 FSP Federal Administrative Costs

	1992	1991	1990	1989	1988
Total FSP Federal Admin. Costs	$19,086,109	$17,569,451	$20,840,430	$20,862,907	$20,895,416
Avg. Federal Admin. Cost Per Household Per Month	$9.57	$10.65	$15.74	$19.33	$22.96

2.4 System Impacts on Program Performance

Food stamp systems typically have an impact in several program performance areas. This section examines the system impact in the areas of staffing, responsiveness to regulatory changes, error rates, and claims collection. There has been an increase in caseworker staffing since system implementation in 1988, although monthly caseload overall has increased, as has the monthly caseload per eligibility worker. The number of issuance workers has decreased due to the purchase of automated mail issuance machinery.

2.4.1 Staffing

Staffing levels for eligibility workers (EWs), EW supervisors, registration workers, and issuance staff within the Arizona Department of Economic Security totals 1,657. Of this total, 1,344 are eligibility workers, 180 are supervisors, 108 are registration workers, and 25 are issuance workers.

Additional staff who have access to AZTECS include administrative and clerical workers, State employees who have inquiry access only, and staff responsible for supporting the application. The number of staff members in these categories was unavailable.

State staff indicated that EW staffing increased during the past five years; however, the staffing increases were not proportional to assistance program participation increases. As a result, average caseload per worker increased by approximately 21 percent during the period. State staff indicated that AZTECS played a major role in enabling EWs to process the larger caseloads in a timely manner.

2.4.2 Responsiveness to Regulatory Change

Arizona has met all Federal regulatory change timeframes, as indicated in Exhibit A-2.1 in Appendix A. Arizona's ability to meet all applicable Federal deadlines demonstrates that the system can be modified within reasonable timeframes. This capability may be attributed to a combination of system design choices and the level of system-specific

knowledge attained by technical support staff during the nearly five years that AZTECS has been operational.

2.4.3 Combined Official Payment Error Rates

Arizona's official combined error rate, as indicated in Table 2.4, increased steadily between 1988 and 1992. The change over the five year period represented a 35.5 percent increase. State staff indicated that two primary factors contributed to rising error rates: the food stamp caseload more than doubled and average caseload per worker also increased. State staff indicated that without AZTECS error rates would be higher.

Table 2.4 Official Combined Error Rate

	1992	1991	1990	1989	1988
Combined Error Rate	13.35	11.23	10.93	10.58	9.85

2.4.4 Claims Collection

Table 2.5 presents data indicating the total value of claims established, the value of claims collected, and the percentage of claims established that were collected. The dollar value of both claim collections and claims established increased each year during the period.

Arizona's claims collected as a percentage of claims established declined overall during the five year period. The claims collection rate decreased in 1989, increased in 1990, and 1991, and decreased again in 1992. The percentage of claims collected is affected by the total number of claims established, whether the individual is still receiving benefits, the amount of available assets, and other factors.

Table 2.5 Total Claims Established/Collected

	1992	1991	1990	1989	1988
Total Claims Established	$3,733,754	$3,166,105	$3,118,201	$2,311,014	$1,491,146
Total Claims Collected	$1,928,285	$1,816,967	$1,722,904	$1,264,206	$1,016,019
As a % of Total Claims Established	51.6%	57.4%	55.3%	54.7%	68.1%

2.4.5 Certification/Reviews

AZTECS received Family Assistance Management Information System (FAMIS) certification in December 1988, with a retroactive effective date of June 1988. Major performance enhancements were initiated in 1989, but these enhancements have not yet been formally reviewed.

The Food and Nutrition Service (FNS) conducted a technical review of the proposed performance enhancements in April 1989. The areas examined included: system performance constraints, the ability of the enhancements to improve operational performance, AZTECS' future needs, and system security and contingency plans. FNS found all plans to be necessary and reasonable and suggested certain areas for regional office monitoring.

3.0 OVERVIEW OF THE CURRENT SYSTEM

AZTECS supports the Food Stamp and AFDC Programs. Workers access the system for clearing, inquiry, and eligibility functions. Data entry is performed from paper application forms, which are completed by applicants and entered into the system by eligibility workers.

Currently, there are no demonstration projects being conducted in Arizona. An Electronic Benefit Transfer (EBT) demonstration is being discussed, however.

3.1 System Functionality

Major features of AZTECS functionality are described in this section. Areas addressed include:

- *Registration.* Applicants are registered on the system by clerical staff within 24 hours after the application is filed at the local office. Clearance is performed on all household members at the time of registration. The system does not require a search on all household members if the case was active within the last four months. The system permits clerical workers to enter up to three lines of narrative comments intended to alert the caseworker about special factors relating to the household. Caseworkers may perform an on-line search on any individual for informational purposes.

  The Pre-Application Screening System (PASS) is used at the time of initial registration and screening. This system allows the clerical registration worker to perform on-line searches against multiple databases. Calculator screens, for basic eligibility functions, also are available through PASS at time of initial screening/application.

- *Eligibility Determination.* During the interview process, the system determines which screens are relevant and presents these screens to the EW in sequence. The EW also can bypass screens as circumstances warrant. All screens have immediate on-line data edits.

- *Benefit Calculation.* The system automatically calculates the benefit level. The EW reviews the system calculation and approves the allotment amount.

- *Benefit Issuance.* Mail is the primary issuance method used in Arizona, although the State makes limited use of over the counter issuance as well. Food coupons are mailed from the central office site. AZTECS generates mailing labels and a client receipt whenever the issuance is certified. Over the counter issuance is provided for a very small percentage of recipients in two geographically remote sites. Arizona designates a redemption clerk in each local office. Expedited issuances can be available the next working day after certification.

  Central office staff and local office staff handle requests for re-issuance of undelivered/stolen coupons by entering information directly into AZTECS. Re-issuance usually takes 10 days for non-certified and five days for certified issuances. The system links the document numbers of original and replacement issuances in the issuance history file. This information is then available for immediate inquiry after the next weekend. The issuance history file for the last 13 issuance periods is maintained on disk and is available for EW query. The remainder of the issuance history is maintained in tape archive and may be recalled via data retrieval screens.

- *Notices.* Notices are automatically generated for several key activities, and the EW can request several other types of notices, which then are printed and mailed from the central office. Workers also have access to weekly outstanding verification reports, which may be printed upon demand at the local office site.

- *Claims System.* The Arizona claims system is integrated with AZTECS. It is operated by a centralized unit through paper claims generated by the local offices. Underpayments can be handled on-line by the local office staff. For overpayments, the system calculates the monthly recoupment amount and subtracts it from the recipient's monthly benefit. It also creates a collection record once the claim has been established. This action must be approved by a supervisor and then sent to the central office in order for a claim to be established within the system. The collection method is determined by the claims unit personnel.

- *Computer Matching.* Other databases that are matched against each other in a scheduled batch mode include: IRS for income and asset information, Beneficiary Earnings Exchange System (BEERS) for Social Security Administration (SSA) wage data, Beneficiary Data Exchange (BENDEX) for Social Security benefit data, and SSA for validation of Social Security numbers (SSN). Matching is performed on a variety of search criteria through a segmented clearance process with multiple keys. SSN matches are the primary clearance key.

  Arizona currently is conducting a study of the Information Eligibility Verification System (IEVS) computer matching process in conjunction with FNS.

- *Alerts.* On-line alerts are provided in AZTECS. The system enforces verification requirements, showing applicants as ineligible until all requirements are met and reported by the eligibility worker.

- *Monthly Reporting.* Arizona requires monthly reporting but plans to eliminate this requirement as of July 1993. The system currently determines which cases are subject to the monthly reporting requirement, produces forms to be mailed to recipients, generates warning notices to late reporters, and automatically closes the case if reports are not received. Receipt of monthly reports is entered into the system by local clerical staff and eligibility workers. Changed data is also entered at this time.

- *Report Generation.* FNS mandated reports are not produced automatically by the system, but the system does provide data which users can re-format for submittal to FNS. Users have a great deal of flexibility in designing ad-hoc system reports.

- *Program Management and Administration.* The system provides a form of electronic mail outside of the AZTECS application structure. All eligibility workers and supervisors and some clerical workers have access to this feature, which provides rapid communication among workers, supervisors, and headquarters staff. The system does not support on-line policy manuals, organizational charts, workload allocation monitoring, case narratives, or problem reporting.

  The SCRATCH PAD system is a stand-alone system used to compute budgets, overpayments, transitional medical eligibility, and similar items. It is accessible

through the same terminals used for AZTECS, but the SCRATCH PAD system does not interface with AZTECS.

3.2 Level of Integration/Complexity

AZTECS supports the Food Stamp and AFDC Programs. General Assistance and Medicaid are included in the APIS system, while Child Welfare (Title IV-E) is supported by ASSIST. The State plans to add Medical and State-specific programs to AZTECS during a 30 month project beginning in the middle of 1993.

The SCRATCH PAD and PASS systems also support the eligibility determination processes for the Food Stamp Program and AFDC.

3.3 Workstation/Caseworker Ratio

Terminal ratio varies among local offices. In general, the ratio is close to one to one.

3.4 Current Automation Issues

AZTECS is a mature, stable system with few operational problems. Food Stamp Program staff indicated that current system response time sometimes is too slow for maximum productivity and that the system experiences occasional downtime.

The staff also expressed some concerns about reports. State staff believe that the accuracy of system reports is questionable. Since users do not have access to selection criteria and data element definitions used to generate reports, misunderstandings about report content can occur. State staff indicated that more emphasis should be placed on using appropriate titles and labels and clearly identifying the information contained in reports. Users also indicated that obtaining ad-hoc reports requires a significant amount of time; however, staff indicated that regular reports are always provided on time.

4.0 SYSTEM DEVELOPMENT AND IMPLEMENTATION

This section provides an overview of the AZTECS system development process. Areas described include: the system that AZTECS replaced, the reasons for developing the new system, the activities involved and problems encountered in development and implementation, the conversion approach used, project management, and State FSP and management information system (MIS) involvement throughout the process.

4.1 Overview of the Previous System

Because AZTECS was developed and implemented in the mid-1980s, specific information on the characteristics of the previous system was unavailable from the State.

4.2 Justification for the New System

Before deciding to transfer an existing system, Arizona considered three options: modifying the current public assistance system, developing a new system in-house, or transferring a system from another state. State staff identified the following benefits that could be achieved with each alternative:

- Consistent application of policy for eligibility determination, benefit calculation, and issuance

- Reduced error potential due to more automated functions and consistent application of policy

- Time savings for the eligibility worker and more information on benefit-related issues provided to recipients as a result of automatic notice generation

- Reduced amounts of paperwork and time savings associated with automated interfaces to the recoupment system

- Easier and more accurate application of complicated policy changes or mass changes through a system that can automatically recalculate benefits

4.3 Development and Implementation Activities

The AZTECS system development effort began in 1984 when Arizona began system reviews of several existing systems. The Alaska, Vermont, North Dakota, and Georgia systems were reviewed. Reviews were conducted either by on-site visits or document review and conversation with State staff.

The basic criterion for system selection was that the potential transfer system must be FAMIS certified. Other selection factors included: the degree of program integration; historical storage capability; and the similarity between Arizona and the potential transfer system's State in terms of approach to the implementation of the FSP, number of caseworkers, and workers' roles and responsibilities.

The State issued a Request for Proposal (RFP) in 1986 for AZTECS. Technical experience in capacity planning was pointed to as an area of expertise that was needed during the transfer process. Program knowledge and internal staff communication were also cited as being necessary to accomplish the project.

During development and implementation it was discovered that the transfer system lacked certain functions that Arizona required. These functions were minor, such as generation of specific types of notices. Other functions were transferred and changed. Approximately 50 percent of the functions identified were modified. Most modifications were uncomplicated, changing a code applicable to Alaska, the transfer State, but not applicable to Arizona, for example. Many potential modifications were identified by Food

Stamp Program staff during this period that were impossible to perform given the lack of time and strict project schedule.

State staff indicated that the contractor, Systemhouse, Inc., was knowledgeable and helpful throughout the project. Systemhouse's previous experience with the Eligibility Information System (EIS) in Alaska and the Technical Eligibility Computer System (TECS) in North Dakota was seen as a major benefit to Arizona's system implementation effort.

The system was fully implemented in July 1988.

4.4   Conversion Approach

Arizona converted from a Honeywell Bull system to an IBM compatible platform for the implementation of AZTECS. The conversion approach was totally manual. Only periodic file prints from the Bull system were used in the conversion process.

With an Advanced Planning Document (APD) approval, the State received authorization to hire temporary staff to assist in the conversion. Full time eligibility workers were hired to conduct the county conversions in the evenings to minimize disruption during the day. Temporary staff were hired to fill the normal eligibility worker roles during the day to enable the more experienced workers to perform conversion activities.

Training was scheduled to coincide with county conversion. This schedule allowed workers to obtain hands-on experience to reinforce the training.

The conversion approach was tested by converting a pilot office in December 1986; statewide implementation began in February 1987. The initial schedule estimated a one-year conversion period. Performance limitations in the hardware and software, however, resulted in a six-month suspension of the conversion effort while a mainframe upgrade was approved, ordered, and installed. Full conversion was reached in the middle of 1988.

4.5   Project Management

The project director for the AZTECS project was assigned from the Office of Planning and Budget within DES and reported directly to the DES Director's Office. The project team consisted of representatives from both AFDC and Food Stamp Program operational areas, the internal MIS group, and the implementation contractor. All of the Arizona staff were assigned to the project as full-time members The team was physically located together in the same office area and separated from the normal day-to-day operations. The intent of the separation was to provide more in-person contact among project team members during the development and implementation phases and to eliminate distractions from other activities.

The Implementation Advisory Group (IAG), consisting of management and worker level programmatic employees, was formed to provide guidance during the development and

implementation phases. The group met biweekly during this period and provided information on requirements, made recommendations, and reviewed final design documents.

The Senior Executive Committee was formed to provide senior level review of project progress and results. The committee, which consisted of assistant directors from most DES divisions, met regularly during the project to establish policy and resolve conflicts within the agency over project focus or direction.

4.6   FSP Participation

Participation of FSP staff during the planning phase of AZTECS was limited to one person on the project team and a number of representatives with general public assistance backgrounds who participated in a variety of pre-development activities.

During the development and implementation stages, support from the food stamp operational area continued, and additional FSP staff were included in IAG. Field representatives also were included during specific phases of the development and implementation cycles to help ensure that the development effort reflected the needs of the program unit.

4.7   MIS Participation

State MIS staff were actively involved in project planning. MIS involvement included reviewing and providing input on technical issues concerning the AZTECS project. MIS personnel also played a large role in the alternatives analysis which concluded that transferring an existing system would be more cost effective than enhancing the previous system or developing a new system in-house.

Systemhouse performed the majority of the technical work during the development phase.

development period. Poor system performance was attributed to the limitations in ADABAS related to the size of the client database. These factors resulted in major processing delays. The problems with system performance and processing halted the conversion effort for six months.

5.0 TRANSFERABILITY

As discussed in Section 4.3, Arizona reviewed the Alaska, Vermont, North Dakota, and Georgia systems as potential transfer candidates. Arizona selected the Alaska EIS system as the primary transfer system and added several unspecified features from the North Dakota system.

Arizona staff modified the system in order to improve its response time, increase the Database Management System's capacity, and customize batch interfaces before implementation. User screens and output reports also were identified as areas requiring modifications to meet Arizona's requirements. Arizona plans to integrate medical eligibility functionality and State-funded programs into AZTECS.

AZTECS was transferred to Utah while the system was still in the design phase, and Utah made major modifications to AZTECS. Since its completion, AZTECS has been transferred to Hawaii, South Carolina, and Kansas.

6.0 SYSTEM OPERATIONS

The following section provides a description of the AZTECS system. The description includes a profile of system hardware and a discussion of the system operating environment.

6.1 System Profile

The components supporting AZTECS are as follows:

•	**Mainframe:**	Hitachi EX/100
		Hitachi EX/80
		MVS/ESA, CICS, ADABAS, ACF2
•	**Disk:**	IBM 3380
		Hitachi 7380/7390
		Hitachi 7990 (Solid State)
•	**Tape:**	Hitachi 7420/7480
•	**Printers:**	Xerox 9790 Laser
		IBM 6262 Impact
•	**Front Ends:**	IBM 3745/3725

- **Workstations:** Courier 3270-type

- **Telecommunications:** SNA/SDLC 4.8 or 9.2 KB circuits connected to Phoenix via analog leased lines

A detailed hardware inventory is provided in Exhibit A-6.1 in Appendix A.

6.2 Description of Operating Environment

This section contains a description of the current operating system environment, including maintenance, telecommunications, performance, response time, and downtime. Current system activities and future plans also are discussed.

6.2.1 Operating Environment

The Department of Data Administration is responsible for data center operations and provides technical and application support for AZTECS. The data center operates seven days a week, 24 hours per day and uses a dual processor configuration that consists of a Hitachi EX/100 and a Hitachi EX/80 mainframe. The data center runs under MVS/ESA, CICS, ABABAS/NATURAL and ACF2.

The Hitachi Data Systems EX/100 is the production system and provides 88 million instructions per seconde (MIPS) of processing power. The EX/80 is used to provide testing, backup, and other automated systems processing for the Department of Economic Services. The EX/80 is connected to the EX/100 by a Data Switch Channel-to-Channel connector. This connection facilitates access to processing capacity and data in case of an outage on the production processor. Utilization levels for the EX/80 average 78 percent and peak at over 90 percent.

The direct access storage device (DASD) pool of Hitachi and IBM equipment provides 196 gigabytes of storage. Most of the installation uses Hitachi drives. The IBM equipment will be phased out during 1993.

Ten Hitachi 7480 cartridges support the 28,000 cartridge tape library. Three 7420 tape reel drives are maintained for external and user tape work.

An uninterruptible power supply (UPS) is installed with both battery and diesel generator backup capability. The batteries provide up to 30 minutes of power and allow time for the generator to be brought on-line if a longer outage is expected. The UPS system was utilized 57 times during a 10 month period in 1988 to ensure the integrity of the data center power needs. It continues to be a valuable investment for Arizona.

6.2.2 State Operations and Maintenance

The DDA provides support staff for AZTECS and all other DES applications. Computer Operations has 88 staff members supporting both operational and data entry activities.

The Technical Support group numbers 27 and consists of systems programmers and network, capacity planning, and telecommunications staff. The database group consists of eight people.

There are 21 CICS regions that run during the first shift. Nine regions are used to support production, three support training, and nine support testing functions. Arizona has split ADABAS into four databases to eliminate processing bottlenecks. Two databases contain application data, and two contain the high and low level indices used by AZTECS.

Hardware and software maintenance are normally performed on Saturdays between 3 p.m. and 11 p.m. Changes are planned and scheduled with DDA staff. Incremental and full data backups are performed daily, weekly, and monthly depending on the amount and criticality of the information.

Arizona staff feel that the State has only the minimum staff in-house to support AZTECS. State hiring freezes have limited the ability to add personnel to support maintenance of and enhancements to the system. In addition, the State is not financially competitive with the Phoenix job market in retaining qualified staff at DES. Higher salaries and more challenging projects elsewhere continue to undermine the ability of DES to maintain a reasonably sized staff of qualified technicians.

6.2.3 Telecommunications

There is no statewide backbone network in Arizona supporting all State agencies, so the network supporting AZTECS is a dedicated, leased line, multi-dropped analog collection of 202 4.8 KB and 9.6 KB circuits connected directly to the Department of Economic Security data center. A T1 link also is used between Tucson and Phoenix to handle the higher transaction volumes. The network utilizes the SNA/SDLC protocol to support 120 control units, 1,872 terminals, and 358 printers on the network.

6.2.4 System Performance

The Hitachi EX/100 is the normal processing platform for AZTECS, which utilizes approximately 44 percent of the CPU resource. During peak processing periods, the system is running in excess of 90 percent CPU utilization, with average processing utilization in the 85 percent range. This level of utilization suggests that an upgrade will be required in the near term to alleviate the processing bottleneck now developing. The entire system handles approximately 1.7 million transactions a day. On average, 730,000 transactions per day are AZTECS transactions.

6.2.5 System Response

Arizona does not maintain timings for terminal response time, i.e., the time needed to get a response after the enter key is hit. Neither systems nor Program personnel indicated that response time performance was a problem for system users.

6.2.6 System Downtime

DDA has a performance target of 98 percent availability. Except for those periods when abnormal maintenance or power fluctuation activity occurs, performance levels have stayed in the 98 to 99 percent range. Neither DDA nor FAA staff indicated that system availability was a problem.

6.2.7 Current Activities and Future Plans

Concrete plans are in place to make the following hardware and software changes in Arizona:

- Replace the EX/80 with a Hitachi GX 8310 in the middle of 1993

- Replace the IBM 3380 DASD with Hitachi 7390 DASD

- Implement DB2 for some Department of Labor application efforts and make DB2 available for consideration by other database uses for future projects

7.0 COST AND COST ALLOCATION

This section addresses the following AZTECS cost-related topics: development costs of the original AZTECS and the AZTECS Performance Modifications Enhancements, referred to as AZTECS MOD; the current operating costs of AZTECS; and the methodology for allocating AZTECS development costs and operating costs to the Food Stamp Program.

7.1 AZTECS Development Costs and Federal Funding

The initial Advanced Planning Document for the AZTECS system was issued in 1984. This APD was submitted to and approved by the Department of Health and Human Services (DHHS) and FNS in 1984 and June 1985, respectively. A revised annual update to the 1984 APD was issued in June 1985. The initial funding request was for $8.7 million; $6.6 million of this amount was for hardware and COTS software. The 1985 APD addressed multiple automation requirements and was retitled the Comprehensive New Development (CND) APD. The core AFDC/Food Stamp Program subsystem was just one of the automation subjects addressed in the APD. A revised APD was issued each year from 1984 through 1988.

The budget for AZTECS allocated 20 percent of the development costs to DHHS and 80 percent to FNS. The initial AZTECS budget was revised in June 1986. The majority of the budget increase was associated with an increase in personal services of in-house staff only. The portion of the new budget allocated to the Food Stamp Program was 80 percent based on the Arizona Random Moment Survey (ARMS).

In June 1988, FNS approved the FSP share of CND at $20 million, with total Federal financial participation (FFP) of almost $15 million for the costs of the CND.[3] The breakout was as follows:

- Previously approved CND costs of $10.4 million were funded at 75 percent for a total of $7.8 million, for the period July 1, 1981 through March 31, 1986

- AZTECS costs of $10.8 million with the FSP share of $8.7 million, of which $8.66 million was funded at 75 percent and $73,476 was funded at 50 percent

- Common equipment costs of $2.2 million with the FSP share of $805,000, of which $538,000 was funded at 75 percent and $267,000 was funded at 50 percent

A second APD was issued in 1989 for the AZTECS MOD to improve system performance. FNS approved the AZTECS MOD and full funding of the $4,516,276 cost in December 1989.[4] The FSP share of that amount was approved at between 65 and 75 percent. AZTECS MOD development was to begin in October 1989. The lack of State funding appropriation, however, delayed the start of the effort until 1992.

AZTECS MOD APD updates were issued in 1991 and 1992. The AZTECS MOD costs had increased to $4.7 million. However, the FFP costs to FNS had decreased by $552,479 due to a shift in program allocation percentages.[5] The total FSP share of AZTECS MOD development costs decreased to $1,231,000: $889,000 for development costs and $342,000 for equipment depreciation. The FFP was granted at 50 percent.

AZTECS MOD development began in January 1992. Completion is currently scheduled for June 1993. FNS approved the 1992 revised APD in June 1992. DHHS disapproved the 1992 APD in response to the change in program allocations.[6] As of December 1992, Arizona, DHHS, and FNS had not reconciled their differences.

Table 7.1, AZTECS Development Costs, shows that the total development cost for AZTECS (actual) and AZTECS MOD (estimated) is $18,814,946. The FSP share, $12,460,363, is approximately 66 percent of total AZTECS costs.

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[3] Letter, 6/27/88.

[4] Letter, 12/13/89.

[5] Letter, 6/22/92.

[6] Letter, 8/10/92.

Table 7.1 AZTECS Development Costs[7]

AZTECS COST COMPONENTS	DEVELOPMENT COSTS	EQUIPMENT COSTS	TOTAL
ORIGINAL AZTECS 10/85 - 6/88	$11,855,976	$2,224,976	$14,080,952
FSP Share	$9,459,211	$539,934	$9,999,145
FSP Share	80%	24%	71%
AZTECS MOD[8] 1/90 - 6/93	$1,162,716	$3,571,278	$4,733,994
FSP Share	$558,966	$1,902,252	$2,461,218
FSP Share	48%	53%	52%
TOTAL AZTECS	$13,018,692	$5,796,254	$18,814,946
FSP Share	$10,018,177	$2,442,186	$12,460,363
FSP Share	77%	42%	66%

7.1.1 AZTECS System Components

The original AZTECS was implemented statewide in June 1988 and FAMIS certified in December 1988. The AZTECS MOD is scheduled for completion in June 1993.

7.1.2 Major AZTECS Development Cost Components

The major AZTECS cost components include hardware, transfer and development contractor support, and State personnel support.

7.1.2.1 Hardware

Hardware purchased by the agency to support the original public assistance system totalled $2,224,976 and included a mainframe, DASD, and a laser printer. The share of this hardware allocated to support the Food Stamp Program was $539,934. This hardware was approved and purchased through the APD process.

Hardware funding needs continued to change between 1991 and 1993. Additional terminals, communications equipment, and a printer were purchased for $1.5 million in 1991. An additional one million dollars was expended in 1992 for hardware to support Medicaid, as well as AFDC and the FSP. The 1991 and 1992 hardware

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[7] Cost Accounting Interview Guide and Survey, March 1992.

[8] The effort began in January 1990 and is scheduled for completion in June 1993. The numbers provided here are both actual and estimated.

procurements were made through letter requests rather than the APD process and were not considered be part of development. In 1993, less than one million dollars in additional hardware was requested. Approval for the most recent hardware purchase has not been given.

All hardware is to be depreciated over a 60-month period.[9]

7.1.2.2 Contractor Costs

In December 1985, a fixed-price contract was awarded to Systemhouse, Inc. to provide transfer, development, and implementation support to the AZTECS development effort. The period of performance was 27 months, from December 1985 through March 1988. The dollar value of the award was $2 million.

An additional $200,000 was added to the contract during the contract period to include essential software modifications that had been dropped from the original contract. The length of the contract was extended by nine months.

7.1.2.3 State Personnel Costs

State staff worked closely with Systemhouse staff during original AZTECS development effort. The approximate cost for State personnel resources was five million dollars.

The AZTECS MOD was accomplished by State staff. The 1992 APD budgeted almost $900,000 for personnel. The actual personnel costs to date were not provided.

7.2   AZTECS Operational Costs

The original AZTECS APD estimated annual AZTECS operating costs to be $425,000. The actual operating costs for AZTECS and the share allocated to the Food Stamp Program are shown in Table 7.2, AZTECS Operating Costs.

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[9] Letter, 8/11/89.

Table 7.2 AZTECS Operating Costs

FEDERAL FISCAL YEAR	TOTAL OPERATING COSTS	FSP SHARE $	FSP SHARE %
1988	$1,535,742	$1,399,513	91%
1989	$3,358,126	$3,137,930	93%
1990	$5,449,631	$4,371,107	80%
1991	$5,920,828	$4,181,325	71%
1992	$5,894,973	$4,683,234	79%

7.2.1 Cost Per Case

Based on the FSP share of annual AZTECS operating costs of $4,683,234 for 1992, the monthly FSP share of costs was calculated to be $390,270. The cost per case month -- based on monthly participation of 167,380 Food Stamp Program households -- was $2.33.

7.2.2 ADP Operational Cost Control Measures and Practices

The Division of Data Administration within the Department of Economic Security operates the data center that provides operational support to AZTECS. AZTECS ADP operational costs are allocated as detailed in Section 7.3.2.

7.3 Arizona Cost Allocation Methodologies

ARMS is used to determine the percentage allocation to be applied to all costs that cannot be directly charged to a specific program. ARMS sampling is done daily in all offices, by phone, from the central office. All eligibility workers are eligible for sampling. Adjustments to the allocation percentages are made monthly.

The following sections address the cost allocation methodology used during original AZTECS development, the unapproved switch in primary program status from FNS to AFDC during AZTECS MOD planning, and the methodology used to allocate operating costs between the Federal agencies.

7.3.1 Historical Overview of AZTECS Development Cost Allocation Methodology

Arizona proposed in the 1984 APD update that AZTECS development costs be allocated 48 percent to DHHS's Office of Family Assistance (OFA) and 52 percent to FNS. These percentages were selected based on guidance received during a Federal review. The percentages were based on North Dakota's transfer experience which used a *cost* allocation methodology based on eligibility time studies.

FNS questioned the use of the North Dakota allocation basis in August 1985.[10] The Department of Health and Human Services considered it improper for Arizona to distribute FAMIS expenditures based on North Dakota's allocation ratio and alerted Arizona to this as early as October 1985.[11] Both FNS and DHHS recommended that Arizona use the Arizona Random Moment Survey to distribute AZTECS expenditures because it would better reflect the benefits and level of effort to the participating Federal programs (FSP and AFDC). DHHS further requested that expenditures recognized after July 1, 1985 be distributed based on the revised allocation methodology developed by Arizona, and that adjustments be reflected on appropriate reports. DHHS warned that, until corrective action was taken, all FAMIS funding would be held in abeyance.

On May 16, 1986, Arizona submitted a revised cost allocation methodology for the development effort using a modified ARMS. The ARMS ratio would be modified to back out programs included in ARMS but not associated with AZTECS. Using modified ARMS, the FSP share would be 85.48 percent and the OFA share would be 14.52 percent. These percentages would be used for planning purposes only; the actual percentages would be calculated monthly based on annual rolling averages. Arizona also requested that the modified ARMS ratio be applied retroactively to January 1, 1986 rather than July 1, 1986 to minimize the work required to make the necessary adjustments.

On September 4, 1986, FNS approved the use of modified ARMS for allocating AZTECS development costs. The approval was granted retroactively to July 1, 1985.[12] This allocation methodology remained in use throughout the development, implementation, and conversion period.

The APD for the AZTECS MOD was submitted in August 1989 with an estimated cost of $4,516,276. The common cost allocation was set at 20.67 percent for DHHS, and 79.33 percent for FNS. The proposed method for distributing costs used a modified ARMS to determine the cost distribution for the Family Assistance Administration benefitting program area. The modified ARMS percentages were to be calculated monthly and updated quarterly based on annual moving averages.

DHHS approved the APD and the 20.67 percent allocation in September 1989. FNS, however, withheld APD approval pending submission of a cost allocation plan that incorporated the use of separate cost pools with allocation of these common costs determined by a revised Arizona ARMS approved by the Federal agencies involved.

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[10] Letter from FNS to Arizona, 8/9/85.

[11] Letter from Department of Health and Human Services to Douglas Patino, Director DES, 6/16/86.

[12] Letter from FNS to Douglas Patino, Director of Department of Economic Security, 9/4/86.

Both Federal agencies agreed to allocate joint program *hits* recorded during an ARMS sample on an equal basis.[13] Therefore, an ARMS hit is allocated to all benefitting programs equally. FNS accepted the modified ARMS with equal sharing of joint hits among programs in December 1989. This methodology would eventually reduce the FSP share from approximately 80 percent to between 65 and 75 percent.

In July 1990, DES modified the ARMS by implementing new guidelines for calculating program share, referred to as the Primary Program Principle (PPP). The PPP uses established allocation methodologies to distribute the cost of a common activity to the program for which the activity is primarily required. In typical eligibility determinations, the caseworker's efforts are spread across multiple programs. The secondary program(s) involved utilize the information required by the primary program without expending additional effort, thus the justification for distributing the cost of an activity to the primary program rather than the secondary program(s). The AZTECS MOD designated AFDC as the primary program. The cost of any common activity would therefore be allocated to AFDC.

Table 7.3, AZTECS Cost Allocation Shift, illustrates how the allocation of development costs shifted when AFDC became the primary program and FNS the secondary program.[14]

Table 7.3 AZTECS Cost Allocation Shift

AZTECS Program	FISCAL PERIOD ENDING DATE								
	6/90	9/90	12/90	3/91	6/91	9/91	12/91	3/92	6/92
FNS	79%	77%	75%	70%	62%	49%	48%	48%	48%
AFDC	21%	23%	25%	20%	38%	51%	52%	52%	52%

As of December 4, 1992, DHHS had not approved the use of PPP in allocating AZTECS MOD development costs.

7.3.2 AZTECS Operational Cost Allocation Methodology and Mechanics

The AZTECS system became fully operational during June 1988. The operating costs continued to be allocated by the 80/20 split used during development. However, in July 1990, a Primary Program Concept was instituted that made AFDC the primary program, Medicaid the secondary program, and FSP the tertiary program. Table 7.2 shows that between FY 1990 and FY 1991, the operating costs allocated to FNS declined from 80

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[13] A joint program "hit" represents a case being worked on by a State employee that involves more than one benefitting program when the employee is being sampled.

[14] As documented in the April 1992 Advanced Planning Document Update (APDU).

to 71 percent, a nine percent decrease. An explanation as to why the allocation returned to almost 80 percent in the next fiscal year was not available.

All costs that can be specifically tied to a single AZTECS-supported program are accumulated into a cost pool that is allocated 100 percent to that program. Food Stamp Program personnel as well as the technical staff assigned to DES charge their time directly to specific public assistance programs using timesheets. The depreciation costs associated with the mainframe computer, DASD, and peripheral equipment are fixed at the time of purchase and charged to the programs based on a fixed rate. Software costs, printer, and telecommunications usage are accumulated by cost pool identifier and allocated using modified ARMS.

Table 7.4, Allocation Cost Pools, presents the set of cost pools involved in FNS automated system development and operations.

Table 7.4 Allocation Cost Pools

TYPE OF COST POOL	COST POOL	ALLOCATION BASE
Direct Cost Pools	Occupancy (space, utilities, etc.)	Square footage occupied
	Postage clearing	Number of full time equivalents (FTEs)
	Warehouse supplies	
	Issuance	Residents ÷ non residents
	FAA ARMS	Random sample
	Save Pool	Client counts
Indirect Cost Pools	ODA/Data Support	Percent total billing updated quarterly
	ODA/Voice Pool	
	ODA/Data Entry	MTDC to specific cost centers
	ODA/Mainframe	
	ODA/Mini Support	Percent total billing
	Machine Hours Pool	Machine hours used
	CYC New Development Equipment	EDP Devices
	AZTECS System Maintenance	
	AZTECS PE/Equipment	
	AZTECS PE/Operations	Modified ARMS

APPENDIX A

STATE OF ARIZONA

EXHIBITS

Exhibit A-2.1
Response to Regulatory Changes

Code	Regulation	Provision	Federally Required Implementation Date	Implemented on Time (Y/N)?	Computer Programming Changes Required (Y/N)?	Changes to State Policy/ Legislation Required (Y/N)?
1.1	1: Mickey Leland Memorial Domestic Hunger Relief Act	1: Excludes as income State or local GA payments to DHHS provided as vendor payments. 273.9(c)(1)(ii)(F)	8/1/91	N/A	N/A	N/A
1.2	1: Mickey Leland Memorial Domestic Hunger Relief Act	2: Excludes from income annual school clothing allowance however paid. 273.9(c)(5)(i)(F)	8/1/91	N/A	N/A	N/A
1.3	1: Mickey Leland Memorial Domestic Hunger Relief Act	3: Excludes as resource for Food Stamp purposes, household resources exempt by Public Assistance (PA) and SSI in mixed household. 273.8(e)(17)	2/1/92*	Y	N	Y
1.4	1: Mickey Leland Memorial Domestic Hunger Relief Act	4: State agency shall use a standard estimate of shelter expense for households with homeless members. 273.9(d)(5)(i)	2/1/92*	Y	N	Y
2.1	2: Administrative Improvement & Simplification Provisions of the Hunger Prevention Act	1: Extended resource exclusion of farm property and vehicles. 273.8(e)(5),etc.	7/1/89	Y	N	N
2.2	2: Administrative Improvement	2: Combined initial allotment	1/1/90	Y	Y	N

Exhibit A-2.1
Response to Regulatory Changes

Code	Regulation	Provision	Federally Required Implementation Date	Implemented on Time (Y/N)?	Computer Programming Changes Required (Y/N)?	Changes to State Policy/ Legislation Required (Y/N)?
3.1	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	1: Exclusion of job stream migrant vendor payments. 273.9(c)(1)(ii)	9/1/88	Y	Y	Y
3.2	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	2: Exclusion of advance earned income tax credit payments. 273.9(c)(14)	1/1/89*	Y	N	Y
3.3	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	3: Increase dependent care deductions. 273.9(f)(4), etc.	10/1/88	Y	Y	Y
3.4	3: Disaster Assistance Act & Non-Discretionary Provisions of the Hunger Prevention Act	4: Eliminate migrant initial month proration. 273.10(a)(1)(ii)	9/1/88	Y	Y	Y
4.1	4: Issuance	1: Mail issuance must be staggered over at least ten days. 274.2(c)(1)	4/1/89	Y	Y	N
4.2	4: Issuance	2: Limitation on the number of replacement issuances. 274.6(b)(2)	10/1/89	Y	Y	N
4.3	4: Issuance	3: Destruction of unusable coupons within 30 days. 274.7(f)	4/1/89	Y	N	N

* These dates were changed after the State completed this form and the site visit occurred; therefore, the responses to these particular regulatory changes may be inaccurate.

Exhibit A-6.1
State of Arizona
Hardware Inventory

Component	Make	Acquisition Method	Number/ Features
CPU			
EX/100 (AZTECS)	Hitachi	Purchase	64 channels, 512 MB main storage, 0 MB extended storage, 88 MIPS
EX/80 (TEST)	Hitachi	Purchase	48 channels, 384 MB main storage, 0 MB expanded storage, 50 MIPS
DISK			
3380	IBM	Purchase	Controllers - 3880 (1) Drives - 3380 (10)
7380/7390	Hitachi	Purchase	Controllers - 7890/7990 (10) Drives - 7380 (80), 7390 (32)
7990 (Solid State)	Hitachi	Purchase	512 MB
TAPE			
Cartridge Drives	Hitachi	Purchase	7480 (10)
Tape Reel Drives	Hitachi	Purchase	7420 (3)
PRINTERS			
Laser	Xerox	Purchase	9790 (2)
Impact	IBM	Purchase	6262 (2)
FRONT ENDS			
37XX	IBM	Purchase	3725 (2) 3745 (1)
REMOTE EQUIPMENT			
3270 Type	IDEA Courier	Purchase	1,657

APPENDIX B

STATE OF ARIZONA

ANALYSIS OF OPERATOR USER SATISFACTION SURVEYS

OVERVIEW

This appendix presents the results of the Operational Level User Satisfaction Survey. Frequency counts of responses to all applicable items on the survey are included, grouped by the topic covered by the item. The results for the items covering each topic are summarized as well.

The responses to the Operational Level User Satisfaction Survey are the perceptions of eligibility workers in Arizona. In other words, these responses do not necessarily represent a "true" description of the situation in Arizona. For example, the results presented regarding the response time of the system reflect the workers' perceptions about that response time, not an objective measure of the actual speed of the response.

Description of the Sample

The survey was sent to 63 eligibility workers. The following table summarizes the potential population size and the final size of the sample who responded.

Number of EWs in Arizona	Number Selected to Receive Survey	Percentage Selected
1,344	63	4.7%
	Number Responding to Survey	Response Rate
	28	44.4%

The eligibility workers selected to receive the survey were selected randomly so their perceptions should be representative of eligibility workers in Arizona. The response rate of 44 percent is low, producing a sample whose responses may not be representative of the eligibility workers in Arizona.

Since Arizona's current system has been operational for more than five years, comparisons between the current and previous systems would be of limited value. Questions that compare the old system and current system are therefore not included.

Summary of Findings

Most of the respondents are satisfied with the computer system in Arizona. They generally find it responsive, accurate, and easy to learn. A majority reports that the system helps them do their work and is rarely more of a problem than a help.

SYSTEM CHARACTERISTICS

Response Time

What is the quality of overall system response time?

	Number of Respondents	Percentage of Respondents(%)
Poor	2	7.1
Good	23	82.1
Excellent	3	10.7

What is the quality of system response time during peak periods?

	Number of Respondents	Percentage of Respondents(%)
Poor	13	46.4
Good	14	50.0
Excellent	1	3.6

How often is the system response time too slow?

	Number of Respondents	Percentage of Respondents(%)
Rarely	5	17.9
Sometimes	20	71.4
Often	3	10.7

Almost all of the eligibility workers (93 percent) think the system response time is generally good but a significant proportion (82 percent) indicate that response time is sometimes or often too slow.

Availability

How often is the system available when you need to use it?

	Number of Respondents	Percentage of Respondents(%)
Sometimes	3	10.7
Often	25	89.3

How often is the system down?

	Number of Respondents	Percentage of Respondents(%)
Rarely	11	39.3
Sometimes	13	46.4
Often	4	14.3

Most of the eligibility workers (89 percent) feel the system is available when they need to use it, although 61 percent also think that the system is sometimes or often down which detracts from the perception that the system is generally available.

Accuracy

What is the quality of the information in the system?

	Number of Respondents	Percentage of Respondents(%)
Poor	1	3.6
Good	20	71.4
Excellent	7	25.0

How often is a case terminated in error?

	Number of Respondents	Percentage of Respondents(%)
Rarely	18	66.7
Sometimes	9	33.3

How often is eligibility incorrectly determined?

	Number of Respondents	Percentage of Respondents(%)
Rarely	18	64.3
Sometimes	9	32.1
Often	1	3.6

How often is the systems data out-of-date?

	Number of Respondents	Percentage of Respondents(%)
Rarely	16	57.1
Sometimes	12	42.9

The eligibility workers feel that the information in the system is good or excellent but significant percentages feel the system is sometimes error prone, e.g., incorrectly determining eligibility.

Ease of Use

How often do you have difficulty obtaining necessary information from the system?

	Number of Respondents	Percentage of Respondents(%)
Rarely	16	57.1
Sometimes	10	35.7
Often	2	7.1

How often do you have difficulty learning to use the system?

	Number of Respondents	Percentage of Respondents(%)
Rarely	26	92.9
Sometimes	1	3.6
Often	1	3.6

How often do you have difficulty tracking receipt of monthly reporting forms?

	Number of Respondents	Percentage of Respondents(%)
Rarely	14	87.5
Sometimes	2	12.5

How often do you have difficulty automatically terminating benefits for failure to file?

	Number of Respondents	Percentage of Respondents(%)
Rarely	21	87.5
Sometimes	3	12.5

How often do you have difficulty generating adverse action notices?

	Number of Respondents	Percentage of Respondents(%)
Rarely	21	77.8
Sometimes	5	18.5
Often	1	3.7

How often do you have difficulty generating warning notices?

	Number of Respondents	Percentage of Respondents(%)
Rarely	19	76.0
Sometimes	5	20.0
Often	1	4.0

How often do you have difficulty determining monthly reporting status?

	Number of Respondents	Percentage of Respondents(%)
Rarely	14	82.4
Sometimes	2	11.8
Often	1	5.9

How often do you have difficulty restoring benefits?

	Number of Respondents	Percentage of Respondents(%)
Rarely	21	80.8
Sometimes	5	19.2

How often do you have difficulty identifying recipients already known to the State?

	Number of Respondents	Percentage of Respondents(%)
Rarely	19	67.9
Sometimes	9	32.1

How often do you have difficulty updating registration data?

	Number of Respondents	Percentage of Respondents(%)
Rarely	19	79.2
Sometimes	5	20.8

How often do you have difficulty updating eligibility and benefit information from recertification data?

	Number of Respondents	Percentage of Respondents(%)
Rarely	22	84.6
Sometimes	3	11.5
Often	1	3.8

How often do you have difficulty identifying cases which are overdue for recertification?

	Number of Respondents	Percentage of Respondents(%)
Rarely	20	74.1
Sometimes	5	18.5
Often	2	7.4

How often do you have difficulty monitoring the status of all hearings?

	Number of Respondents	Percentage of Respondents(%)
Rarely	10	55.6
Sometimes	5	27.8
Often	3	16.7

How often do you have difficulty tracking outstanding verifications?

	Number of Respondents	Percentage of Respondents(%)
Rarely	14	58.3
Sometimes	8	33.3
Often	2	8.3

How often do you have difficulty automatically notifying households of case actions?

	Number of Respondents	Percentage of Respondents(%)
Rarely	21	84.0
Sometimes	3	12.0
Often	1	4.0

How often do you have difficulty notifying recipients that recertification is required?

	Number of Respondents	Percentage of Respondents(%)
Rarely	23	85.2
Sometimes	3	11.1
Often	1	3.7

How often do you have difficulty identifying cases making payments through recoupment?

	Number of Respondents	Percentage of Respondents(%)
Rarely	22	91.7
Sometimes	1	4.2
Often	1	4.2

How often do you have difficulty identifying error prone cases?

	Number of Respondents	Percentage of Respondents(%)
Rarely	14	56.0
Sometimes	9	36.0
Often	2	8.0

How often do you have difficulty identifying cases involving suspected fraud?

	Number of Respondents	Percentage of Respondents(%)
Rarely	14	58.3
Sometimes	7	29.2
Often	3	12.5

How often do you have difficulty assigning new case numbers?

	Number of Respondents	Percentage of Respondents(%)
Rarely	15	65.2
Sometimes	6	26.1
Often	2	8.7

Most of the eligibility workers responding do not have difficulty performing any of the system-specific tasks; the percentage of those reporting rarely having difficulty with these tasks ranges from 56 to 92 percent but is generally toward the higher end of the range. The system is easy to learn since 93 percent report rarely having trouble learning to use it.

FOOD STAMP PROGRAM NEEDS

Worker Satisfaction Levels

How often is the system a great help to you in your job?

	Number of Respondents	Percentage of Respondents(%)
Sometimes	4	14.3
Often	24	85.7

How often is the system an added stress in your job?

	Number of Respondents	Percentage of Respondents(%)
Rarely	15	53.6
Sometimes	11	39.3
Often	2	7.1

How often is the system more of a problem than a help?

	Number of Respondents	Percentage of Respondents(%)
Rarely	24	85.7
Sometimes	3	10.7
Often	1	3.6

Most of the eligibility workers who responded think that the current system is a great help to them in their work (86 percent) and only 7 percent report that it often adds stress to their *jobs*.

Client Service

How often is expedited service difficult to achieve?

	Number of Respondents	Percentage of Respondents(%)
Rarely	21	77.8
Sometimes	5	18.5
Often	1	3.7

How often do you have difficulty providing expedited services?

	Number of Respondents	Percentage of Respondents(%)
Rarely	19	76.0
Sometimes	4	16.0
Often	2	8.0

Most of the eligibility workers who responded agree that expedited service is rarely difficult to provide.

Fraud and Errors

No data are available to address fraud and errors because all the questions in this category compare the current and previous systems. Since Arizona's system was implemented more than five years ago, comparative questions are not applicable.

APPENDIX C

STATE OF ARIZONA

ANALYSIS OF MANAGERIAL USER SATISFACTION SURVEYS

OVERVIEW

This appendix presents the results of the Managerial Level User Satisfaction Survey. Frequency counts of responses to all items on the survey are included, grouped by the topic covered by the item. The results for the items covering each topic are summarized as well.

The responses to the Managerial Level User Satisfaction Survey are the perceptions of supervisors in Arizona. In other words, these responses do not necessarily represent a "true" description of the situation in Arizona. For example, the results presented regarding the response time of the system reflect the managers' perceptions about that response time, not an objective measure of the actual speed of the response.

Description of the Sample

The survey was sent to 30 local office supervisors. The following table summarizes the potential population size and the final size of the sample who responded.

Number of Supervisors in Arizona	Number Selected to Receive Survey	Percentage Selected
177	30	16.9
	Number Responding to Survey	Response Rate
	12	40.0%

The supervisors selected to receive the survey were selected randomly so their perceptions should be representative of the population of supervisors in Arizona. The response rate of 40 percent, however, is low, producing a sample whose responses may not be representative of supervisors in Arizona.

Summary of Findings

Most of the supervisors think the system is very good and helps them in their jobs. Almost all respondents found the system easy to use and easy to learn. The supervisors also reported rarely having difficulty performing their specific system-related tasks.

Since Arizona's current system has been operational since 1988, comparisons between the current and previous systems would be of limited value. Responses to comparative questions, therefore, are not solicited for systems that were implemented more than five years ago.

SYSTEM CHARACTERISTICS

Response Time

What is the quality of overall system response time?

	Number of Respondents	Percentage of Respondents
Good	10	83.3
Excellent	2	16.7

What is the quality of system response time during peak periods?

	Number of Respondents	Percentage of Respondents
Poor	6	50.0
Good	4	33.3
Excellent	2	16.7

The supervisors who responded almost all agree that the system's response time is generally good or excellent although half think the system response time is poor during peak usage.

Availability

How often is the system down?

	Number of Respondents	Percentage of Respondents
Rarely	6	50.0
Sometimes	5	41.7
Often	1	8.3

Half the supervisors who responded think the system is generally available.

Accuracy

What is the quality of the information in the system?

	Number of Respondents	Percentage of Respondents
Good	10	83.3
Excellent	2	16.7

How often do you have difficulty obtaining necessary information from the system?

	Number of Respondents	Percentage of Respondents
Rarely	7	58.3
Sometimes	4	33.3
Often	1	8.3

The supervisors who responded generally find the information and algorithms of the system to be accurate. All of them think the information in the system is either good or excellent.

Ease of Use

How often do you have difficulty learning to use the system?

	Number of Respondents	Percentage of Respondents
Rarely	11	91.7
Sometimes	1	8.3

How often do you have difficulty tracking receipt of monthly reporting forms?

	Number of Respondents	Percentage of Respondents
Rarely	4	50.0
Sometimes	4	50.0

How often do you have difficulty automatically terminating benefits for failure to file?

	Number of Respondents	Percentage of Respondents
Rarely	6	60.0
Sometimes	2	20.0
Often	2	20.0

How often do you have difficulty generating adverse action notices?

	Number of Respondents	Percentage of Respondents
Rarely	7	58.3
Sometimes	5	41.7

How often do you have difficulty generating warning notices?

	Number of Respondents	Percentage of Respondents
Rarely	9	75.0
Sometimes	3	25.0

How often do you have difficulty determining monthly reporting status?

	Number of Respondents	Percentage of Respondents
Rarely	8	100.0

How often do you have difficulty restoring benefits?

	Number of Respondents	Percentage of Respondents
Rarely	9	81.8
Sometimes	2	18.2

Most of the supervisors responding have no difficulty obtaining information and no difficulty in learning the system. Those who responded generally do not have difficulty performing such specific tasks as generating warning notices or restoring benefits.

FOOD STAMP PROGRAM NEEDS

Supervisor Satisfaction Levels

How often is the system a great help to you in your job?

	Number of Respondents	Percentage of Respondents
Sometimes	1	8.3
Often	11	91.7

How often is the system an added stress in your job?

	Number of Respondents	Percentage of Respondents
Rarely	9	75.0
Sometimes	3	25.0

All of the supervisors who responded think that the current system is a great help to them in their work and a majority (75 percent) do not feel that it contributes added stress.

Management Needs

What is the quality of the reports produced by the system?

	Number of Respondents	Percentage of Respondents
Poor	2	18.2
Good	8	72.7
Excellent	1	9.1

What is the quality of the support provided by the technical staff supporting the automated system?

	Number of Respondents	Percentage of Respondents
Poor	1	10.0
Good	8	80.0
Excellent	1	10.0

How often do you have difficulty making mass changes to the system?

	Number of Respondents	Percentage of Respondents
Rarely	6	60.0
Sometimes	4	40.0

How often do you have difficulty meeting Federal reporting requirements?

	Number of Respondents	Percentage of Respondents
Rarely	5	62.5
Sometimes	2	25.0
Often	1	12.5

All of the supervisors responding think the system helps them in their management tasks, although 37 percent reported difficulty in meeting Federal reporting requirements and a 40 percent reported difficulty making mass changes. Most think the support provided by the technical staff is good or excellent.

Client Service

No data are available to address client service because all the questions in this category compare the current and previous systems. Since Arizona's system was implemented more than five years ago, comparative questions are not applicable.

Fraud and Errors

No data are available to address client service because all the questions in this category compare the current and previous systems. Since Arizona's system was implemented more than five years ago, comparative questions are not applicable.